

Area of Learning	Year 6 2017/2018		
	What was the main factor for the outbreak of War in 1939? Why did Nazi Germany surrender?	Were the Vikings always victorious and vicious?	I'm a year 6 pupil get me out of here!
Numeracy	<ol style="list-style-type: none"> <li>1. [KEY] Y6 MATHS NUMBER PLACE VALUE Round any whole number to a required degree of accuracy.</li> <li>2. [KEY] Y6 MATHS NUMBER PLACE VALUE Use negative numbers in context, and calculate intervals across zero.</li> <li>3. [KEY] Y6 MATHS MULTIPLICATION DIVISION Multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication.</li> <li>4. [EXS] [KEY] Y6 MATHS MULTIPLICATION DIVISION Divide numbers up to 4 digits by a two-digit number using the formal written method of short division where appropriate, interpreting remainders according to the context.</li> <li>5. [EXS] [KEY] Y6 MATHS MULTIPLICATION DIVISION Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.</li> <li>6. [KEY] Y6 MATHS MULTIPLICATION DIVISION Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.</li> <li>7. [EXS] [KEY] Y6 MATHS FRACTIONS DECIMALS Use written division methods in cases where the answer has up to two decimal places.</li> <li>8. [EXS] [KEY] Y6 MATHS FRACTIONS DECIMALS Solve problems which require answers to be rounded to specified degrees of accuracy.</li> <li>9. [EXS] [KEY] Y6 MATHS FRACTIONS DECIMALS Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.</li> <li>10. [EXS] [KEY] Y6 MATHS RATIO PROPORTION Solve problems involving the calculation of percentages [for example, of measures, and such as 15% of 360] and the use of percentages for comparison.</li> <li>11. [KEY] Y6 MATHS RATIO PROPORTION Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.</li> <li>12. [EXS] [KEY] Y6 MATHS ALGEBRA Use simple formulae.</li> <li>13. [EXS] [KEY] Y6 MATHS MEASUREMENT Use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to three decimal places.</li> <li>14. [EXS] [KEY] Y6 MATHS SHAPE Compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons.</li> <li>15. [KEY] Y6 MATHS POSITION Draw and translate simple shapes on the coordinate plane, and reflect them in the axes.</li> <li>16. [KEY] Y6 MATHS STATISTICS Interpret and construct pie charts and line graphs and use these to solve problems.</li> </ol>		

**17. [KEY] Y6 MATHS STATISTICS** Calculate and interpret the mean as an average.

### Autumn

**1. [EXS] [KEY] Y6 MATHS NUMBER PLACE VALUE** Read, write, order and compare numbers up to 10 000 000 and determine the value of each digit.

**2. Y6 MATHS NUMBER PLACE VALUE** Round any whole number to a required degree of accuracy.

**3. Y6 MATHS NUMBER PLACE VALUE** Use negative numbers in context, and calculate intervals across zero.

**4. [EXS] [KEY] Y6 MATHS NUMBER PLACE VALUE** Solve number and practical problems that involve large numbers, rounding and negative numbers.

**5. Y6 MATHS MULTIPLICATION DIVISION** Multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication.

**6. Y6 MATHS MULTIPLICATION DIVISION** Divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context.

**7. [EXS] [KEY] Y6 MATHS MULTIPLICATION DIVISION** Divide numbers up to 4 digits by a two-digit number using the formal written method of short division where appropriate, interpreting remainders according to the context.

**8. [EXS] [KEY] Y6 MATHS MULTIPLICATION DIVISION** Perform mental calculations, including with mixed operations and large numbers.

**9. Y6 MATHS MULTIPLICATION DIVISION** Identify common factors, common multiples and prime numbers.

**10. [EXS] [KEY] Y6 MATHS MULTIPLICATION DIVISION** Use their knowledge of the order of operations to carry out calculations involving the four operations.

**11. [EXS] [KEY] Y6 MATHS MULTIPLICATION DIVISION** Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.

**12. [EXS] [KEY] Y6 MATHS MULTIPLICATION DIVISION** Solve problems involving addition, subtraction, multiplication and division.

**13. Y6 MATHS MULTIPLICATION DIVISION** Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.

**14. Y6 MATHS FRACTIONS DECIMALS** Use common factors to simplify fractions; use common multiples to express fractions in the same denomination.

**15. Y6 MATHS FRACTIONS DECIMALS** Compare and order fractions, including fractions greater than 1.

**16. [EXS] [KEY] Y6 MATHS FRACTIONS DECIMALS** Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions.

**17. [EXS] [KEY] Y6 MATHS FRACTIONS DECIMALS** Multiply simple pairs of proper fractions, writing the answer in its simplest form [for example,  $1/4 \times 1/2 = 1/8$ ].

**18. [EXS] [KEY] Y6 MATHS FRACTIONS DECIMALS** Divide proper fractions by whole numbers [for example,  $1/3 \div 2 = 1/6$ ].

**19. [EXS] [KEY] Y6 MATHS FRACTIONS DECIMALS** Associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction [for example,  $3/8$ ].

**20. Y6 MATHS FRACTIONS DECIMALS** Identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places.

**21. [EXS] [KEY] Y6 MATHS FRACTIONS DECIMALS** Multiply one-digit numbers with up to two decimal places by whole numbers.

**22. [EXS] [KEY] Y6 MATHS FRACTIONS DECIMALS** Use written division methods in cases where the answer has up to two decimal places.

**23. [EXS] [KEY] Y6 MATHS FRACTIONS DECIMALS** Solve problems which require answers to be rounded to specified degrees of accuracy.

**24. [EXS] [KEY] Y6 MATHS FRACTIONS DECIMALS** Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.

### Spring

**1. [EXS] [KEY] Y6 MATHS FRACTIONS DECIMALS** Associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction [for example,  $3/8$ ].

**2. Y6 MATHS FRACTIONS DECIMALS** Identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places.

**3. [EXS] [KEY] Y6 MATHS FRACTIONS DECIMALS** Multiply one-digit numbers with up to two decimal places by whole numbers.

**4. [EXS] [KEY] Y6 MATHS FRACTIONS DECIMALS** Use written division methods in cases where the answer has up to two decimal places.

	<p>5. [EXS] [KEY] Y6 MATHS FRACTIONS DECIMALS Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.</p> <p>6.Y6 MATHS RATIO PROPORTION Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts.</p> <p>7. [EXS] [KEY] Y6 MATHS RATIO PROPORTION Solve problems involving the calculation of percentages [for example, of measures, and such as 15% of 360] and the use of percentages for comparison.</p> <p>8.Y6 MATHS RATIO PROPORTION Solve problems involving similar shapes where the scale factor is known or can be found.</p> <p>9.Y6 MATHS RATIO PROPORTION Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.</p> <p>10. [EXS] [KEY] Y6 MATHS ALGEBRA Use simple formulae.</p> <p>11.Y6 MATHS ALGEBRA Generate and describe linear number sequences.</p> <p>12.Y6 MATHS ALGEBRA Express missing number problems algebraically.</p> <p>13. [EXS] [KEY] Y6 MATHS ALGEBRA Find pairs of numbers that satisfy an equation with two unknowns.</p> <p>14.Y6 MATHS ALGEBRA Enumerate possibilities of combinations of two variables.</p> <p>15. [EXS] [KEY] Y6 MATHS MEASUREMENT Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate.</p> <p>16. [EXS] [KEY] Y6 MATHS MEASUREMENT Use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to three decimal places.</p> <p>7.Y6 MATHS MEASUREMENT Convert between miles and kilometres.</p> <p>18.Y6 MATHS MEASUREMENT Recognise that shapes with the same areas can have different perimeters and vice versa.</p> <p>19.Y6 MATHS MEASUREMENT Recognise when it is possible to use formulae for area and volume of shapes.</p> <p>20.Y6 MATHS MEASUREMENT Calculate the area of parallelograms and triangles.</p> <p>21.Y6 MATHS MEASUREMENT Calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm<sup>3</sup>) and cubic metres (m<sup>3</sup>), and extending to other units [for example, mm<sup>3</sup> and km<sup>3</sup>].</p> <p>22.Y6 MATHS STATISTICS Interpret and construct pie charts and line graphs and use these to solve problems.</p> <p>23.Y6 MATHS STATISTICS Calculate and interpret the mean as an average.</p> <p><b><u>Summer</u></b></p> <p>1.Y6 MATHS SHAPE Draw 2-D shapes using given dimensions and angles.</p> <p>2.Y6 MATHS SHAPE Recognise, describe and build simple 3-D shapes, including making nets.</p> <p>3. [EXS] [KEY] Y6 MATHS SHAPE Compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons.</p> <p>4.Y6 MATHS SHAPE Illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius.</p> <p>5. [EXS] [KEY] Y6 MATHS SHAPE Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles.</p> <p>6.Y6 MATHS POSITION Describe positions on the full coordinate grid (all four quadrants).</p> <p>7.Y6 MATHS POSITION Draw and translate simple shapes on the coordinate plane, and reflect them in the axes.</p>
Literacy	<p><b><u>WWII</u></b></p> <p><b>Skills</b></p> <p>1. [KEY] Y6 WRITING TRANSCRIPTION Use dictionaries to check the spelling and meaning of words.</p> <p>2. [EXS] [KEY] Y6 WRITING COMPOSITION Plan their writing by identifying the audience for and purpose of the writing, selecting the appropriate form and using other similar writing as models for their own.</p> <p>3. [EXS] [KEY] Y6 WRITING COMPOSITION Draft and write by describing settings, characters and atmosphere and integrating dialogue to convey character and advance the action in narratives.</p>

4. [KEY] Y6 WRITING COMPOSITION Draft and write by using further organisational and presentational devices to structure text and to guide the reader [for example, headings, bullet points, underlining].
5. [KEY] Y6 WRITING COMPOSITION Evaluate and edit by ensuring the consistent and correct use of tense throughout a piece of writing.
6. [KEY] Y6 WRITING COMPOSITION Proof-read for spelling and punctuation errors.
7. [KEY] Y6 WRITING VOCABULARY GRAMMAR PUNCTUATION Develop their understanding of the concepts set out in English Appendix 2 by recognising vocabulary and structures that are appropriate for formal speech and writing, including subjunctive forms.
8. [EXS] [KEY] Y6 WRITING VOCABULARY GRAMMAR PUNCTUATION Develop their understanding of the concepts set out in English Appendix 2 by using passive verbs to affect the presentation of information in a sentence.
9. [KEY] Y6 WRITING VOCABULARY GRAMMAR PUNCTUATION Use grammatical terminology for Year 6 understanding layout devices [for example, headings, sub-headings, columns, bullets, or tables, to structure text].
10. [EXS] [KEY] Y6 WRITING VOCABULARY GRAMMAR PUNCTUATION Indicate grammatical and other features by using a colon to introduce a list.
11. [EXS] [KEY] Y6 WRITING VOCABULARY GRAMMAR PUNCTUATION Indicate grammatical and other features by punctuating bullet points consistently.

### **Goodnight Mr Tom**

Newspaper articles (recount) 3 weeks - passive voice and use of direct and indirect speech. Also look at the use of commas, brackets and dashes for parenthesis.

Characterisation (narrative) 3 weeks - use of dialogue and how to use this to build a picture about a character.

### **Beowulf**

Persuasive writing (Letter) - use of subjunctive form, passive voice and other formal techniques. Start to ensure children are using colons, semi-colons and dashes for effect.

Overcoming the monster story - draft and write by describing setting, characters and atmosphere integrating dialogue.

Non-chronological report - use of layout devices. To ensure accurate spellings of topic vocabulary.

Instructions - use of colon to introduce a list accurately. Use of structure to build cohesion.

### **Cogheart**

Rags to riches story

Biography

Instructions

Poetry - orally recite poems, form opinions on poems. Write own poem exploring the language techniques used.

<p>Science</p>	<p><u>Animals including humans</u></p> <ul style="list-style-type: none"> <li>• The Circulatory system including the function of the heart and the role of our blood in our body to transport nutrients, oxygen and waste around our body.</li> <li>• Write a story in role as a blood cell moving around our body.</li> </ul> <p><u>Light</u></p> <ul style="list-style-type: none"> <li>• Gain and understanding that light travels in straight lines and how this causes a shadow to be formed (investigation). As part of the investigation children to be expected to present their findings accurately and use a graph (line).</li> <li>• Identify the parts of the eye and its role in helping us see things and how light enters our eyes.</li> <li>• To recognise how the Light Spectrum works.</li> </ul> <p><u>Evolution and Inheritance</u></p> <ul style="list-style-type: none"> <li>• To identify that living things produce offspring and that they will not be identical to their parents due to adaptation and inheritance.</li> <li>• Recognise that living things change overtime and that fossils are formed in soil, which is where we gain an understanding of what things from the past are like.</li> <li>• Identify how different animals/ humans have adapted to their environments and explore how this has caused evolution e.g. Darwin, climate etc.</li> </ul> <p><u>Living Things</u></p> <ul style="list-style-type: none"> <li>• Look at the different groups of living things and how animals/plants are classified based on their characteristics. Children to identify the similarities and differences between them.</li> </ul> <p><u>Electricity</u></p> <ul style="list-style-type: none"> <li>• Identify the key components which make up a circuit.</li> <li>• Recognise that a circuit cannot work if there is a break in the circuit.</li> <li>• Identify how the brightness of a bulb or the volume of a buzzer can change.</li> <li>• Ensure that when drawing circuits the correct symbols are used. Children to recognise the two different types of circuits - series and parallel.</li> </ul>
<p>History</p>	<p><u>Skills</u></p> <p>1.Y3,4,5,6 HISTORY The Viking and Anglo-Saxon struggle for the Kingdom of England to the time of Edward the Confessor.</p> <p>2.Y3,4,5,6 HISTORY A local history study.</p> <p><u>Keep calm and carry on</u></p> <ul style="list-style-type: none"> <li>• Identify the key reason for war and the countries involved.</li> <li>• Discuss the impact of war upon Britain both then and how it shaped our present day.</li> </ul>

	<ul style="list-style-type: none"> <li>• Experience life as an evacuee.</li> </ul> <p><u>Were the Vikings always victorious and vicious?</u></p> <ul style="list-style-type: none"> <li>• Identify key events during the Viking invasion (Monks).</li> <li>• Explore different artefacts from the time.</li> <li>• Look at how they had an impact on our world today.</li> </ul> <p><u>I'm a year 6 pupil get me out of here!</u></p> <ul style="list-style-type: none"> <li>• Life in 'The Black Country' in present day.</li> <li>• Local history study of the town of Bournville and John Cadbury's influence.</li> </ul>
Geography	<p><u>Skills</u></p> <p>1.Y3,4,5,6 GEOGRAPHY Locational Knowledge Locational knowledge: Locate the world's countries, using maps to focus on Europe (including the location of Russia) and North and South America, concentrating on their environmental regions, key physical and human characteristics, countries, and major cities.</p> <p>2.Y3,4,5,6 GEOGRAPHY Locational Knowledge Locational knowledge: Identify the position and significance of latitude and the Prime/Greenwich Meridian and time zones (including day and night).</p> <p>3.Y3,4,5,6 GEOGRAPHY Locational Knowledge Locational knowledge: Identify the position and significance of longitude, Equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn.</p> <p>4.Y3,4,5,6 GEOGRAPHY Human and Physical Human and physical geography: Describe and understand key aspects of human geography, including types of settlement and land use.</p> <p>5.Y3,4,5,6 GEOGRAPHY Skills and Fieldwork Geographical skills and fieldwork: Use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied</p> <p>6.Y3,4,5,6 GEOGRAPHY Skills and Fieldwork Geographical skills and fieldwork: Use fieldwork to observe, measure, record and present the human and physical features in the local area using a range of methods, including sketch maps, plans and graphs, and digital technologies.</p> <p><u>Keep calm and carry on</u></p> <ul style="list-style-type: none"> <li>• Locating the countries involved in the war and the impact they all had.</li> <li>• The impact that war had upon the environment.</li> </ul> <p><u>Were the Vikings always victorious and vicious?</u></p> <ul style="list-style-type: none"> <li>• Locate the Scandinavian countries on a map.</li> <li>• Recognise that the Vikings came from other countries and settled in other countries.</li> </ul> <p><u>I'm a year 6 pupil get me out of here!</u></p> <ul style="list-style-type: none"> <li>• Locate the Continents on a map and knowing where we are in the world.</li> <li>• Identify the position of the Equator, the Northern Hemisphere, Southern Hemisphere and the Tropics on a map.</li> </ul>

	<ul style="list-style-type: none"> <li>• <b>Begin to identify the human and physical features of a local area.</b></li> </ul>
Computing	<p><b>1.</b>Y3,4,5,6 IT COMPUTING Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.</p> <p><b>2.</b>Y3,4,5,6 IT COMPUTING Use sequence, selection, and repetition in programs; work with variables and various forms of input and output.</p> <p><b>3.</b>Y3,4,5,6 IT COMPUTING Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.</p> <p><b>4.</b>Y3,4,5,6 IT COMPUTING Understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration.</p> <p><b>5.</b>Y3,4,5,6 IT COMPUTING Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.</p> <p><b>6.</b>Y3,4,5,6 IT COMPUTING Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.</p> <p><b>7.</b>Y3,4,5,6 IT COMPUTING Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</p>
PE	<p><b>1.</b>Y3,4,5,6 PHYSICAL EDUCATION General PE Play competitive games, modified where appropriate, and apply basic principles suitable for attacking and defending.</p> <p><b>2.</b>Y3,4,5,6 PHYSICAL EDUCATION General PE Develop flexibility, strength, technique, control and balance.</p> <p><b>3.</b>Y3,4,5,6 PHYSICAL EDUCATION General PE Perform dances using a range of movement patterns.</p> <p><b>4.</b>Y3,4,5,6 PHYSICAL EDUCATION General PE Take part in outdoor and adventurous activity challenges both individually and within a team.</p> <p><u>Autumn - Gymnastics</u></p> <ul style="list-style-type: none"> <li>• To be able to perform a point balance independently, as a group and as a pair.</li> <li>• They will be able to use a range of equipment in their performances and assess the effectiveness of their own and each other's performances.</li> <li>• Children will be expected to begin to link leaps together and complex tumbles.</li> </ul> <p><u>Spring - Bhangra</u></p> <ul style="list-style-type: none"> <li>• Use hand gestures accurately.</li> <li>• Create routines in small groups.</li> <li>• Tell a story using the movements of dance.</li> <li>• Perform movements fluently.</li> </ul> <p><u>Spring - Tennis</u></p> <ul style="list-style-type: none"> <li>• Children to perform continuous downward bounces using the racket.</li> <li>• Children to be able to complete successful volley shots.</li> <li>• Children to play a game of Tennis using the correct scoring method.</li> </ul> <p><u>Summer - Fitness test</u></p> <ul style="list-style-type: none"> <li>• To successfully complete a fitness test.</li> <li>• To understand the importance of fitness.</li> <li>• To identify ways of keeping fit.</li> <li>• To understand that in order to get fitter the changes take time.</li> </ul>
Art and Design	<p><u>Keep calm and carry on</u></p> <ul style="list-style-type: none"> <li>• Design a ration meal.</li> </ul>

	<ul style="list-style-type: none"> <li>• Propaganda posters.</li> <li>• Silhouette of a ruined town.</li> <li>• Anderson shelters.</li> </ul> <p><u>Were the Vikings always victorious and vicious?</u></p> <ul style="list-style-type: none"> <li>• Create a Viking Longship using a range of materials.</li> </ul> <p><u>I'm a year 6 pupil get me out of here!</u></p> <ul style="list-style-type: none"> <li>• Self-portrait - making changes to it using the idea of Pop Art or Van Gogh.</li> </ul>
Music	<p>1.Y3,4,5,6 MUSIC Play and perform in solo and ensemble contexts, using their voices with increasing accuracy, fluency, control and expression.</p> <p>2.Y3,4,5,6 MUSIC Play and perform in solo and ensemble contexts, playing musical instruments with increasing accuracy, fluency, control and expression.</p> <p>3.Y3,4,5,6 MUSIC Listen with attention to detail and recall sounds with increasing aural memory.</p> <ul style="list-style-type: none"> <li>• Chn to understand the notation involved when playing the recorder.</li> <li>• Chn to learn to play a range of songs on a recorder; performing as solo musicians and in a group.</li> </ul>
RE	<p><b>Autumn - Caring for the Earth</b></p> <ul style="list-style-type: none"> <li>• Christian creation story.</li> <li>• Hindu creation story.</li> <li>• St Francis of Assisi.</li> </ul> <p><b>Autumn - Speaking for yourself</b></p> <ul style="list-style-type: none"> <li>• Confirmation.</li> <li>• Bar Mitzvah and Bat Mitzvah.</li> </ul> <p><b>Spring - Ways of Worship</b></p> <ul style="list-style-type: none"> <li>• Kirtans and Mool Mantar.</li> <li>• Hymns and prayers.</li> <li>• Reflection on worship.</li> <li>• Worship in a Mosque.</li> </ul> <p><b>Summer - Freedom</b></p> <ul style="list-style-type: none"> <li>• Passover and Exodus.</li> <li>• Story of Moses.</li> <li>• Refugees.</li> </ul>